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ABSTRACT

Historical antecedents of the American doctorate are reviewed, the functional differences between the Ph.D. and professional doctorates are compared, and the question of the quality associated with traditional versus nontraditional programs is addressed. Early origins of the doctorate, the influence of the German university, standardization of the American Ph.D., extension of the Ph.D. to the professions, and the current status of the American doctorate are covered. The cultural context in the development of graduate programs and the accreditation of doctoral degrees are analyzed, as is the process-production approach to the doctorate, in contrast to the admission-to-the-ranks process of the early European model. It is suggested that the American doctorate rests on the following broad achievements: a demonstrable mastery of a distinct, recognized field of graduate study; possession of a pertinent research or scholarship skill; and design and completion of a significant work of scholarship or research. Quality assurance in American graduate education has been generally indirect and process oriented rather than direct and results oriented. The key ingredient has been a strong majority of distinguished faculty. Performance criteria for doctoral candidates are suggested. (SW)

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THE AMERICAN DOCTORATE

in the Context of New Patterns in Higher Education

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Preface

In this essay the authors address one of the major issues, albeit rather elusive, confronting graduate education in this decade. The authors review the historical antecedents of the American doctorate, compare the functional differences between the Ph.D. and professional doctorates, and finally, address the question of the dimensions of quality associated with traditional versus nontraditional programs.

Diversity is one of the hallmarks of graduate education. The diversity extends from program structure and content to the manner in which the program is delivered or made available to students. Diversity occurs in both traditional and nontraditional programs. Many of the nontraditional programs include off-campus study and may constitute external degree programs.

Does this diversity, when it results in a nontraditional program, affect the quality of the program, particularly at the doctoral level? Are the usual standards for evaluation of quality equally appropriate for traditional and nontraditional programs? There is diversity of objectives among programs, including those at the doctoral level. This accentuates the problem of program evaluation for quality. Differences in objectives among programs require that corresponding differences be recognized in dimensions of quality.

In 1977 the Council of Graduate Schools in the United States published a policy paper on "Non-Residential Graduate Degree Programs." The following statement is taken from this paper:

> "We believe strongly that the development of external degree programs is an important trend in American higher education. The healthy growth of such programs is encouraged and supported by CGS. However, questions have been raised with respect to certain aspects of these programs, including matters of territoriality, responsibility and jurisdiction, and motivation as well as questions regarding the quality of courses and programs."

Problems associated with the status and quality of nontraditional academic programs, particularly at the graduate level, need to be addressed more aggressively by the graduate community. "The American Doctorate in the Context of New Patterns in Higher Education" offers a series of interpretations, conclusions, and recommendations which stimulate the discussion.

Michael J. Pelczar, Jr., President
Council of Graduate Schools in the United States

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THE AMERICAN DOCTORATE AND NONTRADITIONAL EDUCATION

Nontraditional doctoral programs and institutions raise very searching questions for accrediting bodies — programmatic and institutional. Basically the issue appears to pivot on the process versus results question. Are the traditional forms, structures, and processes associated with graduate education necessary to maintain high standards in terms of student performance?

In this paper, the doctorate is described in terms of its evolution in order to set it in perspective for current developments in nontraditional higher education. After an overview of the history of the doctorate, we attempt to deal with such questions as the following:

1. What are the historical antecedents of the American doctorate, and what is its most fundamental meaning today?

2. Are there substantial functional differences between the Doctor of Philosophy and the established professional doctorates? Are the differences substantial enough for a regional accrediting body to refuse nontraditional institutions approval to grant the Ph.D. while allowing them to award professional doctorates such as the Doctor of Business Administration and Doctor of Education?

3. What are the fundamental quality control points in conventional doctoral programs and how applicable are they to nontraditional institutions and programs? What alternative approaches might be appropriate?

Early Origins*

The doctorate originated in the Middle Ages with the founding of the earliest universities at Paris and Bologna. The Middle Ages had no counterpart to the modern corporation.[1] At the time universities arose, the only concept of a corporate body outside of the church was the *universitas* (a community or guild).

The doctorate initially represented a certificate of admission to the guild of professors and doctors. Such a guild of professors emerged in medieval society in response to the collective power already being exercised by student guilds. Hence in its earliest stage, the doctorate simply meant membership in the professors' guild. Membership in this guild carried with it the license to teach, an exclusive right of the *universitas* of professors.

A little later licensing individuals to teach became an ecclesiastical as well as a faculty responsibility. With the coming of papal approval as a requirement for authorization to grant degrees, universities passed from local to international organizations. The doctorate gained a place in the hierarchical system of medieval Christendom similar to the priesthood or knighthood.[2] Once a university received papal approval to award degrees, its graduates were internationally sanctioned. The title of doctor conveyed the full right to teach at any university without further examination.[3]

The demand for learned men outside of the university increased late in the twelfth century. Inasmuch as the right and ability to teach a subject represents a good indication of knowing it, students often sought the license to teach solely as a general certificate of scholarly achievement. Given the number of persons receiving the doctorate in the second half of the twelfth century, taking the doctoral degree with no intention of teaching must have become a common practice.[4]

The titles master, doctor, and professor were synonymous during the Middle Ages. At Bologna, a center for the study of civil and canon law, a professor was referred to as a doctor (from *docere*, to teach). This usage spread throughout Italy and into Germany. At Paris, and later at Oxford, faculty members were called masters. Until modern times, the German Doctor of Philosophy and the English Master of Arts represented equivalent degrees.[5]

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*Portions of this section draw on research initially presented in "Educational Credentials: Past, Present, and Future", by John Harris and William Troutt, from *Credentialing Educational Accomplishment*, edited by Jerry W. Miller and Olive Mills, pp.30-31.

In the context of the earliest universities, master and doctor implied titles to an office, i.e., a faculty position. As the number of non-teaching doctors increased, though, the term doctor in particular lost its significance and became more of an accolade than a license.[6] The same transformation eventually took place with the term master.

The Influence of the German University

Following the model of the English college, early American higher education limited itself to baccalaureate-level study. Graduate-level studies emerged in the United States in response to the influence of the German university. This influence on American educational thought can be traced to the early nineteenth century when four American academics were awarded the German Ph.D.[7]

At that time, the German university system was the envy of the intellectual world. Germany depended upon its university system for the training of the professions, but also for the training of its teachers, scholars, and civil servants. University professors were researchers who taught all their students with the same goal in mind; all students were expected to be candidates eventually for the doctorate. Not only university professors, but teachers in the *gymnasia* (secondary schools) and civil servants, were to be Ph.D.'s.[8]

A doctoral graduate did not immediately receive an academic appointment in the German university system. A recent graduate became a *privatdozent*, an unsalaried academic, who might offer a lecture or two or work in a laboratory or library to continue his academic pursuits. After several years at this stage, a *privatdozent* who proved particularly productive as a teacher and scholar might be selected by the university. Flexner notes that this resulted in a learned, although sometimes unhappy, proletariat. In every field of study the German university system produced a host of workers — a supply for the universities, the secondary schools, government, and industry. Flexner estimates that seventy-five percent of German university students subsequently entered practical careers.[9]

During that same period American higher education consisted of mostly denominational colleges with curricula and instructional procedures based on student recitation. American students trained in the uncritical monotonies of classroom recitation found the freedom and challenge of the German university very exciting. To their surprise, the basic student responsibilities were not class attendance and daily memorization but preparation to pass examination. By the end of the century, thousands of Americans had traveled to Germany to study.[10] They brought back to America a veneration of the German university and a desire to graft that system onto American higher education.

Grafting the German system onto the American system proved to be very difficult. Americans began returning from Germany with the doctorate in the 1820's, but for fifty years little progress was made. While the first American Ph.D. was awarded by Yale in 1861, the university on the German model did not emerge until the founding of Johns Hopkins University in 1876.[11] The idea of a graduate school of arts and sciences was not really established until the 1880's, and even then its growth was slow.[12]

Late nineteenth century American higher education continued to show the effects of a prolonged cultural colonialism. American educators still held to a corporate form of institutional governance and a program of classical and religious indoctrination drawn from its colonial experience.[13] Most American colleges were created as corporations with a board of trustees which hired teachers to give instruction in the classics and religion. Unlike Germany, no self-governing faculties with the heritage of a medieval guild existed. The German university represented a cumulative system extending from the *gymnasium* to the Ph.D. Nothing comparable to the *gymnasium* existed in America. American colleges were independent institutions differing in origin and experience from German institutions.

Other obstacles also impeded the adoption of the German university model in America. Instead of recruiting a graduate faculty, typically a college relied on assigning extra duties to existing faculty. Such faculty usually had experience only in forcing immature youth to memorize and recite.

Perhaps the greatest obstacle to imitating the German university and doctorate was the organizational structure marking American higher education in the late nineteenth century. During this period colleges began using the credit hour as the measure of degree requirements. German universities, however, relied on major examinations to determine the awarding of a degree. An emphasis on major examinations allowed greater freedom in the day-to-day operation of the university. Lecture periods were not uniform and might even be ignored in favor of less formal forms of instruction.[14]

Standardization of the American Ph.D.

American higher education had become far more impersonal and standardized. Veysey suggests this might have been connected with the insecurity of early university leaders.[15] Such insecurity easily could have been prompted by the anti-intellectual attitude of American culture toward advanced study and the student indifference then endemic in the American college. Formalization and standardization guaranteed order. The standardization provided

by the credit hour also brought interchangeability. A record of accumulated credit hours also gave a sense of knowing just where individual students stood.

The result of laying a German system with a medieval heritage over an expansive American system with its variety of denominational colleges was a doctorate mixing standardized American collegiate requirements with the trappings of the German Ph.D. The German idea of a doctoral dissertation — a published, publicly defended, contribution to knowledge — became the capstone of the American Ph.D. Nichols comments that most fields, though, did not permit dissertation research until the completion of required coursework.[16] Comprehensive examinations, he notes, also came much too late. Language requirements were added in light of the inadequacies of the undergraduate curriculum in modern languages. The dissertation defense, traditionally a long examination before a disinterested committee, became an hour-and-a-half discussion with immediate instructors.

The Ph.D. at Johns Hopkins University in its early years greatly influenced the practices of other universities.[17] John Hopkins initially opposed standardization of requirements for the doctoral degree, but it soon developed a standardized program for the Ph.D.[18] A highly competitive struggle among the new American universities for prestige inhibited movement toward uniqueness or innovation in light of fears of damaging university prestige.[19]

Students played an important role in this process through affiliated graduate clubs at universities such as Johns Hopkins and Harvard.[20] At its 1896 convention the Federation of Graduate Clubs recommended as minimum requirements for the Ph.D.: (a) attainment of a baccalaureate degree, (b) at least two years of graduate study with one year on the campus of the institution conferring the degree, (c) an adequate examination, and (d) an acceptable thesis of original research.[21]

American higher education from 1900 to World War I was marked by increased standardization of requirements for the doctoral degree. In 1900 about one-third of the Ph.D.s awarded were for off-campus work, or for none, and another eight to ten percent were purely honorary. This practice disappeared by World War I.[22] The Association of American Universities was founded in 1900 to set uniform standards for the Ph.D. It was hoped this organization would "result in a greater uniformity of the conditions under which students may become candidates for higher degrees in different American universities."[23] In 1908, the National Association of State Universities recommended raising the period of postgraduate study for the Ph.D. to three years.[24] From 1916 to 1919 an American Association of University Professors committee reviewed Ph.D. requirements in an effort to "reach some results representing a

common understanding" and to "safeguard standards under existing conditions in American institutions" through the "explicit and unambiguous formulation of ideals."[25] By the end of World War I standards such as residence and language requirements and the character of the dissertation were established that would endure for half a century.

For all its positive benefits, the movement toward the standardization of the Ph.D. was not without its critics. William James argued that the "Ph.D. octopus" would crush the true spirit of learning in the universities. He favored encouraging able students to bypass the degree when it interfered with independent study. James asked if individuality would "count for nothing unless stamped and licensed and authenticated by some title-giving machine."[26]

Extension of the Ph.D. to the Professions

After World War I American higher education experienced dramatic growth in the number of doctorates awarded and the extension of the Ph.D. to several professional fields. By 1940 the Ph.D. was being awarded in agriculture, business, education, engineering, home economics, journalism, library science, nursing, and social work.[27]

Extending the Ph.D. to professional fields provoked a continuing controversy over whether or not the Ph.D. should be awarded for professional study. In 1920 Harvard decided to award the doctorate in education, but it was the Ed.D. rather than the Ph.D. Harvard now awards both the Ed.D. and Ph.D. in education, but many universities continue to award only the Ed.D. as the highest degree in education. Some universities, such as Ohio State University and the University of Chicago, award only the Ph.D. in education. At many universities, such as Harvard and Columbia, both degrees are given, although for supposedly different types of programs. A similar pattern exists for other professional fields such as business, engineering, and public administration where both the Ph.D. and the professional doctorate (D.B.A., D. Eng., and D.P.A.) are offered.[28]

In general, the professions have sought the Ph.D. as their highest degree. Just as inclusion in a college curriculum represents an important first step in the upward mobility of a profession, the Ph.D. symbolizes that the profession has arrived. Extending the Ph.D. to the professions raised some critical questions, though, about the nature of the degree. What are the purposes of the Ph.D.? What does the degree mean? A committee of the Association of Graduate Schools in AAU issued a report on "The Professionalizing of the Ph.D. Degree" indicating that

> entrance of the professional school into the doctoral area and the granting of the doctorate in liberal arts subjects for programs of study primarily aimed at the needs of a professional speciality are vastly complicating the problem of the character and aims of the Ph.D. degree.[29]

In his historical review of graduate study, Berelson notes a trend toward professionalization of the American doctorate in that (a) more doctorates were being awarded in the professional fields and (b) more professionally-oriented doctorates were being awarded in the arts and sciences.[30]

The growth of American higher education and the manpower demands of an increasingly technological American society heightened this controversy over the professionalization of the Ph.D. The Ph.D. had been established in America at a time when the market for doctoral degrees was very limited. The German Ph.D. adopted by the United States was in a very real sense a professional degree, but the American system did not then have the broad outlet for doctoral graduates in various professions outside the academy. In the United States, the Ph.D. became by necessity oriented more toward pure learning than professional training. However, an increasingly technological American society inevitably pressed universities to provide the doctorate in new professional fields. Nevertheless, the controversy continues surrounding the extension of the Ph.D. to such fields.

Current Status of the American Doctorate

American doctoral education has emerged as a very large and diversified enterprise. In 1976, 32,923 doctoral degrees were awarded in over 200 fields and sub-fields of study.[31] This number does not include professional doctorates in law or the health sciences. American doctoral degrees can be divided into three categories:

- the doctorate in the arts and sciences,
- professional doctorates in the traditional learned professions and professions emerging from them, and
- doctorates in the newer professional fields allying primarily with the arts and sciences.

ARTS AND SCIENCES. Almost all of the doctorates awarded in the arts and sciences are Ph.D.s. Efforts to replace the Ph.D. in the arts and sciences with an equivalent, but different, doctoral degree have never succeeded.[32] While language and residence requirements may vary by discipline and institution, the American Ph.D. is basically a standardized degree. Most doctoral programs are arranged so that students can complete all degree requirements in

four to five years of full-time study and research beyond the baccalaureate degree. The Council of Graduate Schools in the United States describes the Ph.D. program as follows:

> A doctoral program consists of lectures, seminars, discussions, independent study, and research designed to help the students make significant contributions to knowledge in a reasonable time. During the first year or two of study, doctoral students usually take formal courses and seminars and may begin research shortly after entering the program, although, initially, most of the effort will be devoted to acquiring a working knowledge of the field through study of the literature. In many institutions, after the formal course work has been largely completed, the language and/or other research tool proficiency examinations have been passed, and the comprehensive (qualifying or preliminary) written and oral examinations have been successfully completed, the students are "admitted to candidacy" for the doctoral degree. They then devote essentially full time to completing the dissertation research planned with the adviser, or major professor, and the committee. An oral defense of the research and dissertation by the candidate before the graduate committee and other persons invited to attend constitutes the final examination.[33]

The nature and purpose of the Ph.D. continues to be the subject of academic debate. According to the Council of Graduate Schools, "The doctoral program is designed to prepare a student for a lifetime of intellectual inquiry that manifests itself in creative scholarship and research, often leading to careers in social, governmental, business, and industrial organizations as well as the more traditional career in university and college teaching."[34] Such a statement gives credence to the position of Berelson and others that today's Ph.D., even in the arts and sciences, is very much a professional degree.

The alternative Doctor of Arts (D.A.) degree is awarded in the arts and sciences at twenty-four institutions. About 500 of these degrees have been granted since the D.A. was introduced in 1967 at Carnegie-Mellon University. The D.A. requires at least three years of graduate study and its requirements emphasize preparation for a career in college teaching. Unlike the Ph.D., the D.A. emphasizes broad subject matter competence and the development of teaching skills.[35] Dressel indicates that while the D.A. still has its critics, "the D.A. has taken its place along with the Ed.D., D.B.A., and D.P.A. and others as special purpose alternatives to the Ph.D."[36]

LEARNED PROFESSIONS. Soon after the founding of the great universities of Bologna and Paris, a pattern of four faculties emerged: Philosophy, Law, Medicine, and Theology. All four

awarded doctoral degrees. The evolution of the first, the Doctor of Philosophy, has been discussed in detail. Unlike the Doctor of Philosophy, degrees in the latter three fields and others emerging from them maintain much of their original professional significance even though program content has changed dramatically.

In medicine, the Doctor of Medicine (M.D.) degree is awarded for an educational program of at least thirty-two months of required and elective activities. According to the Council on Medical Education of the American Medical Association, no single curriculum can be prescribed for this period of medical education. While the student should acquire a foundation of knowledge in the basic sciences and clinical skills, the curriculum should encourage the development of specific student's interests.[37] To prepare for independent medical practice, a student must supplement his M.D. degree with a period of residency training. A physician interested in a career in the basic medical sciences may complete the Ph.D. initially or take it as a second doctorate after the M.D.[38]

In dentistry, the Doctor of Dental Surgery (D.D.S.) degree requires four academic years or three continuous years of study. The Commission on Accreditation of the American Dental Association encourages flexibility in curricular design but emphasizes that "assurance must be included within any proposed curriculum that the educational experience is adequate to ensure clinical competence in all the basic fundamentals necessary for the practice of general dentistry."[39] Many dentists continue their studies to the Master of Science degree in a clinical field. Some earn the Ph.D. in a related basic science.[40]

Other doctorates in the health sciences (Doctor of Veterinary Medicine, Doctor of Osteopathy, Doctor of Optometry) have been modeled after the M.D. Proposals are now being made to implement the Doctor of Pharmacy as the sole undergraduate degree for that profession.[41] A call has also been made to make the Doctor of Nursing the first professional degree in nursing.[42]

In law, the Juris Doctor (J.D.) represents three years of professional work beyond the baccalaureate degree. The J.D. used to be titled the LL.B. (Bachelor of Laws) but was changed to increase professional prestige. The Association of American Law Schools considers the J.D. equivalent to the Ph.D. for academic appointments in other fields, but the J.D.is not a research degree. The Master of Law (LL.M.) represents basically a one-year research degree pursued upon completion of the J.D. The Doctor of Juridicial Science (S.J.D.) involves an additional year of study and the completion of a dissertation. The majority of law school faculty hold only the J.D. degree.

In theology, the Master of Divinity (M.Div.) is normally the nomenclature for the first professional degree. The M.Div. requires

three years of post-baccalaureate study. The Master of Theology (Th.M.) serves as a degree beyond the M. Div., focusing on disciplines contributing to the ministry or on one of the specialized functions of ministry. The Doctor of Ministry (D.Min.) is the highest professional degree related to ministries. The Doctor of Theology (Th.D.) represents the highest theological degree with an academic emphasis undertaken in the context of theological disciplines. The Ph.D. is given primarily in the context of a variety of arts and sciences disciplines. Both the Th.D. and Ph.D. certify research ability and preparation for teaching.[43]

In the learned professions, the professional doctorate predominates and enjoys a status equal to or higher than a research degree. Unlike the Ph.D. in the arts and sciences, the professional doctorate has tended to consist of a standardized curriculum, often guided by professional association recommendations and shaped by state licensing agency demands.[44]

Unlike the newer professional fields, the learned professions generally enjoy complete autonomy in setting degree requirements. Just as these schools tend to have their own libraries, they abide by their own standards for awarding degrees.[45] Newer professions remain much more aligned with the arts and sciences and subject to university-wide degree requirements.

NEWER PROFESSIONS. A large number of doctorates are awarded each year in newer professional fields that ally primarily with the arts and sciences. Fields in this category include business administration, education, engineering, library science, public administration, and social work. While the practice varies from field to field, most institutions give the Ph.D.; others offer only the professional doctorate; and still others grant both — the Ph.D. for research and the professional doctorate for practice.[46]

The substantive differentiation of the professional doctorate and the Ph.D. in these newer professional fields represents an unresolved long-standing dilemma for graduate and professional schools. The recurring and most appropriate recommendation is that the professional doctorate should represent a practitioner's degree and that the Ph.D. should be the degree for scholarly training. The image and prestige of the Ph.D., however, clouds this issue. The newer professions continue to covet the Ph.D. in preference to establishing their own doctoral degrees, even at the expense of conforming to graduate school Ph.D. standards.[47]

Engineering, library science, business administration, and to a lesser extent education and social work, have vigorously sought the Ph.D. The Ph.D. in engineering, library science, and business administration has proven to be more prestigious and popular than the

Doctor of Engineering, Doctor of Library Science, or Doctor of Business Administration. A Goals Committee of the American Society for Engineering Education reported in 1968 that the Doctor of Engineering degree offered a number of benefits, but it would continue to have lower status than the Ph.D. offered through the graduate school. This conclusion would likely apply to most other new professional fields.[48]

A large number of professional doctorates and Ph.D.'s are awarded in education and social work. The Ph.D. and the professional doctorate supposedly vary both in content and purpose, but studies in education and social work provide a different perspective.

In social work, a recent study examined 28 of the 34 existing doctoral programs offering the Ph.D. and the D.S.W., the professional doctorate.[49] Of the 34 schools currently offering doctoral programs, 17 award the Ph.D. and 17 grant the D.S.W. The study examined six components of doctoral study — length of time required for the degree, number of credit hours required, hours given for dissertation and the nature of the dissertation requirement, examination requirements, practicum requirements, and language requirements — and found little difference between schools offering the Ph.D. and those offering the D.S.W.

In education, a survey of doctoral programs at 113 institutions found a surprising level of similarity between the Ed.D.and Ph.D. programs.[50] While the two degrees differ in their statements of purpose, the study revealed only minor differences in the content of the two degrees. Deviations from the traditional dissertation requirement that supposedly distinguish the Ed.D. from the Ph.D. were not evident. Over 90 percent of the Ed.D. programs were described as requiring a formal dissertation as the only acceptable terminal research project. The study did confirm a difference in foreign language requirements. Three-fourths of the Ph.D. programs had a foreign language requirement while virtually no Ed.D. programs had such a requirement. This study did note, however, an unfortunate move to eliminate the foreign language requirement in Ph.D. programs. A recent survey of 81 institutions regarding residence and admissions requirements for the doctorate in educational administration found very few institutions with different requirements for the Ed.D. and the Ph.D.[51] Overall, both studies concur with an earlier report of a Harvard committee on graduate study in education which found little structural uniformity with respect to both the Ed.D. and Ph.D. in education and noted that "the relative quality of the Ed.D. and Ph.D. in Education does not seem to follow a particular pattern, although the prestige of the Ph.D. label is almost invariably higher."[52]

INTERPRETATIONS AND CONCLUSIONS

The following is our interpretation of the evolution of the doctorate and its current status and our conclusions about the meaning of the American doctorate.

Cultural Context

The doctorate originally signified admission to a medieval guild of university teachers. The professorial guild functioned as any other guild admitting whom it chose based on its own criteria. This procedure was not questioned since the doctorate initially had little significance outside the medieval university. Perhaps the academy's loss of exclusive control over the doctorate began when the doctorate became increasingly a symbol of scholarly achievement for use outside the academy.

The doctorate began in a culture fundamentally different from our contemporary technological society. Universities were under the auspices of a universal church rather than an individual state. The church was international while the state was provincial. The doctorate remained uniform because its sanctioning body, the church, assured standardization across national boundaries. For example, Latin was the language of scholars as well as clerics. Furthermore, the doctor or professor often had a religious role, e.g., Luther, Erasmus, Calvin, and Loyola were university scholars as well as religious leaders.

Graduate education today represents primarily a secular concern deeply related to the state, particularly in regard to funding and control. This relation to the state brings a kind of provinciality to the academy. No international organization exists to maintain standards or provide a trans-national nexus to reinforce common perspectives for academic standards. Most akin to such an organization are the international scientific societies.

The doctorate emerged in an era of widely-shared certainties and commitment to stability and order. In contrast, a commitment to change and diversity pervades most industrial and post-industrial societies.

In Europe national ministries replaced the church in providing order and continuity for higher education. Until recently, few alternatives existed. The state established a prevailing pattern which was reinforced by the academic establishment.

American higher education has witnessed a mixture of institutions and sponsors but no national universities or national policy of education. Voluntary accreditation has been the fabric providing common perspectives, continuity, and standardization. Needless to say, accreditation feels the tug between stability and order on one side and change and diversity on the other. Nontraditional higher education severely tests the old fabric of accreditation. Because of its diversity, American higher education, and hence accreditation, tends to stress commonality of processes and time in order to introduce some needed level of equivalency, essential for establishing policies on transfer of credit, professional standards, etc.

So accreditation faces a major challenge. Little cultural uniformity prevails in any arena. "Gentlemen's agreements" that mutually reinforce the concept of graduate education as something taking place only under certain circumstances are diminishing. Furthermore, our society remains very pragmatic about its institutions — they are allowed if they work. Society will allow and even encourage an institution if the public will sustain it. A society condoning any kind literature or music that can find an audience is not likely to exclude an educational venture on purely philosophic grounds.

On what basis then do accrediting agencies deal with institutions claiming to produce doctorates when the usual process components widely accepted for creditable graduate education are set aside or radically altered? The preceding discussion suggests this question is not unrelated to trying to decide what constitutes acceptable music, religion, or literature in a very diverse culture.

Recognition or Production Process

Another critical contrast between the medieval doctorate and its American successor is the difference between acceptance into an honored company and the production of a highly-refined product. The medieval university was a community of credentialled scholars entitled to teach anywhere in Christendom. The doctorate signified admission into this community. In contrast, the doctorate is perceived today in terms of the products of free standing universities governed by lay boards and administered by chief executives. Like it or not, we see university curricula and faculty functioning somewhat like a factory where common processes produce common products. Real difficulty arises, therefore, in knowing the quality of a doctorate without knowing how it was manufactured. Consequently, most quality concerns concentrate on refining the processes. Encouraging faculty to identify and sort good educational achieve-

ments from poor ones regardless of their developmental origins receives little attention.

American doctoral education maintains standards through relatively common residency, coursework, and credit hour accumulation standards. To some extent this may result from accepting a broader range of talent for graduate study than typical European programs. In any case, American educators are more imbued with a common-process-production approach to the doctorate than the admission-to-the-ranks, early European model. To maintain quality through an emphasis on common process requires that no one deviate from the nature of these processes. Such a broad working agreement is hard to sustain in a society emphasizing Yankee ingenuity, free enterprise, and a pragmatic ethic.

Educational Accounting

Another important historical and environmental factor is that the American doctorate was essentially an add-on to collegiate institutions. Course time represents the fundamental unit of standardization in American colleges. This developed in the early 1900s out of colleges' interest in complying with certain Carnegie Foundation standards so their faculty could be eligible for the foundation-sponsored retirement system. This development, coupled with the widespread adoption of an elective system based on course accumulation, ushered the comprehensive examination out of undergraduate education. Doctoral study, however emerged with a curious mixture of course accumulation, comprehensive examinations, the dissertation, and required residency. By 1896, the Federation of Graduate Clubs had crystallized what remains as the basic pattern of the doctorate — prior possession of the baccalaureate, demonstrated mastery of a field of study, defense of a dissertation, and the residency requirement.

The "Professional" Doctorate

The American doctorate represents a professional as well as an academic degree. As pointed out earlier, the doctorate even in the liberal arts has a long history of utility outside the academy. In more recent history, this was particularly true of the German Ph.D. Holders of the Ph.D. often took jobs in the civil service, business, and non-university education. The Council of Graduate Schools' statement affirms the utility of the Ph.D. in non-academic settings.

Doctorates in the older professions of medicine, law, and theology developed somewhat differently from those in the liberal arts. The older health-related professions in particular rarely question requirements for full-time residential study. The tight organization of these professions may account for this, but one could argue that clinical practitioner skills are best shaped in an environment control-

led to minimize distraction. A case can also be made for making the major outcome of a professional degree strong professional attitudes capable of withstanding long-term pressure to relax professional standards and ethics. Internalizing such professionalism would be less likely in an uncontrolled environment.

Newer professions such as business, education, and social work tend to be applications of arts and science disciplines that model their doctorate after the arts and science Ph.D. While many of the older professions draw from the basic arts and science disciplines, they have unique perspectives and techniques to transmit. The newer professions, however, usually do not impart a craft. Their programs for doctoral study often represent an uncertain mixture of theory and technique. As previously mentioned, Ph.D.'s and professional doctorates in these newer fields tend to be indistinguishable credentials. *We find no basis in either published policy or surveys of practice to justify differentiating between Ph.D.'s and other established doctorates in their appropriateness for nontraditional delivery*

The latest available statements on the meaning of the doctorate center on expected processes and time spent before the awarding of a degree. We believe, though, that the American doctorate, including the Ph.D., can be represented in terms of achievements. If such achievements could be operationally defined and accepted, the time and manner of attainment would become irrelevant as a factor in quality assurance. Accrediting doctoral degree-granting institutions would rest on whether examiners commissioned by the accreditating agency could replicate the judgments of the institution's faculty in their assessments of the performances and products of graduates.

The American doctorate seems to rest on the following broad achievements:

- a demonstrable mastery of a distinct, recognized field of graduate study;
- possession of a pertinent research or scholarship skill; and
- design and completion of a significant work of scholarship or research in one's designated field of mastery.

The following assessments usually certify these broad attainments:

- extensive written and oral comprehensive examinations over a recognized field of graduate study conducted by acknowledged scholars in that field;
- demonstration of competence in a scholarship or research skill through both direct assessments of competence and evidence of its appropriate use in a dissertation; and
- defense of written research before scholars qualified to judge work within one's designated field of mastery.

Faculties rarely depend entirely on these assessments to certify basic achievements expected for the doctorate. For example, in addition to comprehensive examinations for evidence of mastery of a field, a number of graduate courses are usually required. While language requirements are usually met via examination, other research competencies are usually certified by passing required courses. Completion of significant research is judged by direct examination. A period of residency is woven into all the usual requirements for the doctorate.

While the doctorate represents the one American degree that consistently demands direct demonstration of attainment through examinations, even its award usually rests on an accumulation of several process elements more than examinations. Many believe that some aspects of graduate study cannot be directly assessed. Living and studying in a scholarly environment provide benefits that cannot be concretely expressed. Hopefully, doctoral students will internalize the work habits, values, and perspectives of a community of scholarship. For many students, a doctoral program represents the only opportunity to exprience the rigor of expectation along with the opportunity to pursue a subject constrained only by the conventions and patterns of a discipline.

Such a view has considerable appeal, but realization of this perspective even within traditional institutions can be questioned. In some cases in traditional institutions, residency requirements can be met through three summers of full-time study. Furthermore, persons employed full time often complete degrees without leaving their jobs. Neither of these approaches is consistent with the ideal of continuous immersion in a community of scholars over an extended period of time. Doctoral education often seems to go haltingly between strict adherence to time and process requirements and achievement criteria.

Graduate Faculty

Beyond time and process requirements, a deep commitment exists in most doctoral programs to a full-time, in-residence, graduate faculty noted for publication in their respective fields. In the final analysis the prestige of graduate programs lies in the scholarly repute of such a faculty. Nevertheless, the emphasis on scholarly credentials alone is insufficient. Such a faculty must have the power to shape the program and control the quality. A from-the-top-down line of authority is usually not acceptable in graduate education organizations because it severely limits faculty control of curricula and degree requirements.

The point is that the outcomes of graduate study rarely become explicit. Without explicit, assessable outcomes, the standard becomes whatever a faculty of scholarly repute will recognize as doc-

toral achievement. Presumably, a graduate faculty left to its own devices will resist pressures to compromise standards.

Such an approach to maintaining quality heavily emphasizes appropriate criteria for faculty promotion and tenure and special membership in a graduate faculty. Typically, university faculty reward systems are designed to reinforce faculty performance to meet the image of the graduate faculty scholar. Ideally, the graduate faculty represents "the cream of the crop." A case can be made that these reinforcements pervade even institutions without doctoral programs. Faculty often spend much of their early careers trying to meet these criteria in hopes of joining a graduate faculty. One can see then how any suggestion of moving the judgment of institutional quality from process to outcome standards is so threatening to American academics.

In our opinion, depending upon a system of having the "right people" conduct and control the processes remains delicate at best for traditional institutions and very questionable for nontraditional ones. Such an academic quality control system has the potential for great highs or undistinguished lows. No minimal product specification exists to blunt its reach for excellence, but neither are there early warning signals to detect erosion in "product" quality. If peer pressures, rewards, and constraints are maintained in just the right proportion it can have stellar results. If the right mix of these factors is not maintained, however, the whole undertaking can quickly degenerate.

Enrollment declines seriously threaten this system. Doctoral programs in institutions directly dependent on capitation funding are probably most vulnerable. Graduate programs at institutions such as Harvard or Berkeley, reinforced by research grants and high quality students, might remain unaffected. Institutions struggling for respectability and heavily dependent upon capitation funding, however, likely face a breakdown in their quality assurance system. This could become a major problem in accrediting graduate programs as enrollments stabilize or decline in the 1980s. In summary, maintaining quality through an emphasis on faculty qualifications probably works well for Harvard or Berkeley, but not so well for some other universities, particularly as enrollment competition intensifies.

By quality, we mean standards of achievement expected of successful doctoral graduates. Our focus is not on the quality of instruction or environment for learning, but on matters usually subsumed under maintenance of minimal standards. Nevertheless, the findings of a recent study on the quality of doctoral programs conducted by researchers at the Educational Testing Service is worth noting.[53] The study revealed that indicators of graduate program quality usually cluster in two groups. One group consists of "such characteristics as a department's size, reputation, physical and financial resources,

student academic ability, faculty publications, and the like." The second group is more related to educational characteristics such as "student satisfactions, ratings of the teaching and environment for learning, faculty interpersonal relations, and alumni ratings of their dissertation experiences." The results of this study which involved a survey of history, chemistry, and psychology departments at 25 universities indicate high ratings on the first set of indicators will probably mean lower ratings on the second set of indicators. In other words, what might be termed indicators of research quality appear to be unrelated to indicators of educational quality.

This study provides one indication that the conventional approach to maintaining quality in graduate education fails to assure a rich educational experience or learning environment. The validity and reliability of conventional process standards in assuring minimal floors of proficiency among doctoral graduates is a serious question before accreditation. Are they so valid that all institutions must follow this particular line as opposed to some alternative approach to quality assurance?

RECOMMENDATIONS

In our research and analysis of the historical past and present status of the American doctorate, three issues or questions mentioned at the outset have guided our work:

1. What are the historical antecedents of the American doctorate, and what is its most fundamental meaning today?

2. Are there substantial functional differences between the Ph.D. and the established professional doctorates? Are the differences substantial enough for a regional accrediting body to refuse nontraditional institutions approval to grant the Ph.D. while allowing them to award professional doctorates such as the D.B.A. and Ed.D.?

3. What are the fundamental quality control points in conventional doctoral programs and how applicable are they to nontraditional institutions and programs? What alternative approaches might be appropriate?

The question of the historical antecedents and current meaning of the American doctorate has been addressed throughout the paper. Its current meaning can best be summarized as follows:

- several years of graduate study beyond the baccalaureate degree with at least two or three years of full-time residential study;
- demonstrated mastery of a recognized field of graduate study through extensive comprehensive examinations conducted by recognized scholars;
- competence in a pertinent research skill demonstrated both in completion of certain required courses and in the dissertation;
- independent production of a written work of research and defense of it before acknowledged scholars in the field most related to that research.

As pointed out earlier, the German Ph.D. was often taken for professional or non-academic purposes. The Council of Graduate Schools currently endorses the usefulness of the Ph.D. beyond the academy. Furthermore, comparisons of the structure and requirements between the Ph.D. and the professional doctorate in the same field reveal no substantive differences. Finally, taking the professional outcomes aspect of such degrees seriously suggests more structured environments may be necessary to assure such outcomes than those required to assure the more academic achievements popularly associated with the Ph.D. Therefore, we find no basis for an accrediting body to limit member institutions from considering a nontraditional approach to any doctoral program. Likewise, no basis can be found for refusing to consider applying institutions because they offer the Ph.D. nontraditionally. Nothing suggests the Ph.D. should be uniquely reserved for traditional institutions and programs.

Quality Assurance

As discussed earlier, quality assurance in American graduate education has been generally indirect and process oriented rather than direct and results oriented. The key ingredient has been a strong majority of distinguished faculty. Under optimal conditions this trust-good-people approach seems to work well both in awarding doctorates to very competent people and in facilitating high levels of free inquiry. We doubt, however, the effectiveness of such an approach even in some traditional institutions without nationally recognized faculties and other reinforcing circumstance. In our judgment, attempting to stretch this approach to avowedly nontraditional programs and institutions prostitutes these conventional process standards and probably hinders nontraditional programs and

institutions in making their greatest contribution to American education.

In the "Implications of the Study" chapter of the *Summary Report* on COPA's study of accreditation of nontraditional education, the position is taken that a dichotomy between traditional and nontraditional higher education should not be established. Rather a continuum is more appropriate. The more traditional the institution or program, the more process oriented it will be; the more nontraditional, the more results oriented.[54] By recommending that accreditation develop a *process-performance model,* the implication is that accrediting bodies should deal with institutions and programs on their own grounds.[55] That is, the more traditional the institution, particularly in terms of process and structure, the more the institution should be judged by the traditional process and structure criteria. On the other hand, the less emphasis the institution gives to conventional structures and processes, the more the accrediting agency should expect it to account for itself in terms of results, student achievement. Furthermore, by suggesting a *process-performance model,* it is clear that all institutions, however traditional or nontraditional, are responsible for some minimum of responsibility for either process or performance.

More specifically, to deal rigorously but fairly with all doctoral programs, we recommend that the accrediting body affirm that the doctorate only be awarded for:

- demonstrated mastery in a distinct, recognized field of doctoral study as evidenced by extensive comprehensive written and oral examinations conducted by scholars in the respective field;
- demonstrated competence in research skills relevant to and commonly associated with the candidate's field (with competence demonstrated both through direct assessment and later evidence of its use in the dissertation);
- production of a complete work of significant research satisfactorily defended before acknowledged experts in the respective field;

Performance Criteria

If a doctoral program or instituion is to be reviewed with an emphasis on student performance and results rather than on process and structure, the institution could be required to do the following:

1. Describe in assessable terms the knowledge and skills which constitute mastery in the fields in which it proposes to award or does award the doctorate — describing in detail the means employed to verify this mastery with emphasis on direct assessment amenable to third-party replication.

2. Describe in assessable terms the research competencies expected of each candidate — describing the assessment procedures used to verify these competencies separate from evidence of its appropriate use in the dissertation.

3. Describe in specific terms the nature of the research or scholarly work expected of all candidates and the process by which the institution aggregates a creditable set of examiners to certify the worth of such research and scholarship.

Visiting teams to institutions emphasizing results over process essentially would determine the veracity of the institutions' claims. To recommend accreditation the visiting team should consider three basic questions:

1. Are the stated expectancies commensurate with the generally accepted meaning of the respective degrees awarded?

2. Are the means of assessing or critiquing student performances and products valid and reliable?

3. Is there reason to believe candidates are in fact evaluated against the stated expectancies with the assessment procedures described?

Adopting Bowen's concept of educational criticism,[58] accreditation is based on an outside group of critics validating the judgment of the institution's faculty — its permanent and regular educational critics. When the emphasis is on outcomes, the visiting academics are emphasizing the results of their colleagues' work rather than the circumstances under which they work or their credentials. Inevitably and for the better, we believe such direct concern for results should be directed, also, to the more traditional, process-oriented institutions.

NOTES

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